the time of their burial, must have been deeper than at present. This conclusion might also have been inferred from the fact, that in the neighbouring cliff the same bed, with its shells, has been uplifted some yards above high-water mark. On the coast to the southward abundant proofs occur, of a recent elevation of the continent. In the gravel, nearly all the pebbles are of quartz, and have originally proceeded from the lofty range of the Ventana, distant between forty and fifty miles. Besides the pebbles of quartz, there are a few irregular masses of the same indurated marl, of which the escarpment of the neighbouring great plain is composed. Hence the gravel beds must have been deposited, when the plain existed as dry land; and on it probably those great animals once lived, of which we now find only the remains. The indurated marl forming the plain, is the same kind of rock with that occurring over a wide extent of the Pampas; and there is no reason to doubt, they are parts of one great formation. Nevertheless, the gravel bed of Bahia Blanca, although subsequent to the calcareous formation, may be of the same age with those parts of the Pampas, which stand at a low level near the Plata. For on this whole line of coast, I believe, as the land has continued rising, fresh littoral deposits have been formed; and each of these would often owe part of its materials to the degradation of the one last elevated.

With respect to the relative age of the Monte Hermoso and Punta Alta beds, it is not possible to speak decidedly. A certain degree of similarity in the nature of the strata containing quartz pebbles, and those of the reddish indurated earth; and the short distance between the two localities, would indicate that no long interval had intervened. The beds at Monte Hermoso, certainly were deposited more tranquilly, and probably in a deeper sea; so that even skeletons of animals, no larger than rats, have been perfectly preserved there. In some parts of the surrounding country, obscure traces of a succession of step-formed terraces may be observed; and each of these indicates a period of repose during the elevation of the land, at which time the strata previously existing were worn away, and fresh matter deposited. The Monte Hermoso beds were, perhaps, formed during one such interval, anterior to the accumulation of the shingle bank at Punta Alta.

Mr. G. Sowerby, who has been good enough to examine the shells which were found with the remains of the quadrupeds, has given me the following list.

1.	*Voluta angulata.*	
2.	—— *colocynthis.*	
3.	*Oliva Brasiliensis.*	
4.	——	Nearly related to *O. patula*, but specimen imperfect.
5.	——	Nearly related to *O. oryza*; less nearly to small species now living at Bahia Blanca.
6.	——	*Nov. spec.*
7.	*Buccinum cochlidium.*	
8.	———— *globulosum.*	
9.	————	One or two minute species, perhaps young specimens, — unknown.
10.	*Trochus*	*Nov. spec.* (?) same as one now living in the bay.
11.	————	*Nov. spec.* (?) nearly related to last; differs in not being granular on the surface.
12.	*Assiminia* (?)	Minute species, identical with one living in the bay.
13.	*Bulinus nucleus.*	
14.	*Fissurella*	Probably same as a kind (*nov. spec.* ?) living in the bay.
15.	*Crepidula muricata.*	
16.	————	*Nov. spec.*
17.	*Cytherœa*	Closely related to, or identical with *C. purpurascens.*
18.	*Modiola*	Same as recent kind (*nov. spec.*) living in the bay.
19.	*Nucula*	Near to *N. margaritacea.*
20.	*Corbula*	Minute species, unknown.
21.	*Cardita*	Ditto ditto
22.	*Pecten*	*Nov. spec.* (?) very imperfect specimen.
23.	*Ostrea*	Oysters of the same size now live in the bay.

I may add that a fossil encrusting coralline is the same with one now living in the bay.

Of these shells it is almost certain that twelve species (and the coralline) are absolutely identical with existing species; and that four more are perhaps so; the doubt partly arising from the imperfect condition of the specimens. Of the seven remaining ones, four are minute, and one extremely imperfect. If I had not made a collection (far from perfect) of the shells now inhabiting Bahia Blanca, Mr. Sowerby would not have known as living kinds, five out of the twelve fossils: therefore, it is probable, if more attention had been paid to collecting the small living species, some of the seven unknown ones would also have been found in that state. The twelve first shells, as well as the four doubtful ones, are not only existing species, but nearly all of them inhabit this same bay, on the shores of which they are likewise found fossil. Moreover, at the time, I particularly noticed that the proportional numbers appeared closely similar between the different kinds,—in those now cast up on the beach, and in those embedded with the fossil bones. Under these circumstances, I think, we are justified (although some of the shells are at present unknown to conchologists) in considering the shingle strata at Punta Alta, as belonging to an extremely modern epoch.